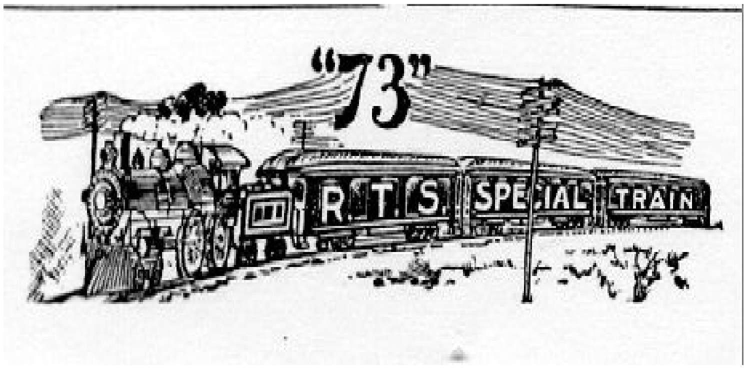
April 23, 2003
15621 SE 26th Street
Bellevue, WA 98008

Dear Friends:

This is the first edition of the Keyletter in Adobe Portable Document Format (PDF), and it has been a learning experience. I am very pleased with the way that the graphics come out in the on-screen version, and the printed copy looks great, especially if done on a color printer.

Many thanks to those of you that donated to help me make this conversion. The biggest problem that I will have in the future will be to keep email addresses up to date, so if you change yours, please let me know!



R.T.S. Special Train. I noticed that there was an earlier discussion in the Keyletter (pages 22,36,78) about the meaning of: "R.T.S. Special Train", a Bunnell trade mark used in some of their early ads. Although I have never seen a written description by J.H. Bunnell & Co. actually spelling out its meaning, I am confident it means the following:

In the early 1900's one of the largest telegraph equipment trade shows was held during the Railway Telegraph Superintendents convention. This was an annual event that was somewhat similar to today's consumer electronics and computer trade shows. It was sometimes referred to as the annual "R.T.S." convention. These superintendents were very influential, jointly employed by the railroad and telegraph companies. They were responsible for building the telegraph lines and made recommendations for purchasing equipment and supplies. Bunnell had a booth set up at all R.T.S. conventions. I am sure Bunnell had these superintendents directly in their marketing cross hairs and gave them special treatment along with special deals. This example is from an ad in the *"Journal of the Telegraph*", August 20, 1900. ***John Casale,W2NI.***

Key and Plug Assembly No 9. After the publication of my article on J-37 keys in the Keyletter #35 I got a very nice and informative email from Chris Bisaillion, VE3CBK. Chris is a collector and restorer of Wireless Set No. 19 equipment. He researched and wrote an article about keys for the Wireless Set No 19 that appeared in *Morsum Magnificat*. The article also appears on the web site run by VE3BDB at: www.qsl.net/ve3bdb

In my article in the Keyletter I identified the modified J-37 used with some if the Wireless Set No 19's as a "B-19" based on an advertisement in the June 1943 *Electronics Magazine*. Chris's information makes it clear that B-19 is not the correct designation, and that the key is properly called "Key and Plug Assembly No 9". ***Scott Hill, K6IX.***

Confessions of a Tyro Key Collector. Once upon a time, there was some sanity in my life. My wife and children saw me occasionally, and life was good. However, in June of 1997, I passed my "No-Code" Tech license and things started to change. In over 40 years, I could never master the code well enough to pass the 5 WPM test. In August 0f 1997, I finally did it.

Since I now have a Tech Plus license and certain code privledges, I said to myself that I needed a key to get on the air. (I had previously acquired a pristine TS-120 complete rig from an estate sale) I went to "Ham Central", my local ham emporium, and bought a "Top of the Line" Ameco. And so started my downfall.

Much like Renfrew, I started small. I went to a garage sale, and there was a Vibroplex Champion sitting on the table. I asked "How Much?". Twenty dollars won't break me, I thought. I went home happy, with a Champion, and the beginnings of a gnawing emptiness in my soul. Not realizing the abyss I was entering, I was very casual and relaxed for the next couple of months. April arrived, and the club Hamfest was upon us. In the spirit of support, I decided to go. Tom Perera was there, and had copies of his Collector's Guide, 1st Edition available. "This looks nice", I say to myself, and not wanting to go home emptyhanded, I bought a copy.

At home, I opened the book to the Champion, and THEY HAD A VALUE OF $45.00!!!!!
I was a genius, an enterpreneur, I was going to retire on this new found skill; the ability to find FANTASTIC bargains in telegraph keys. We all know what has happened since that fateful time. "Codekeyguy" is a regular on e-bay, trades regularly with Australians and Welchmen, corresponds with experts in Massachusetts, New Jersey, Washington State, and Colorado, has accumulated a library of key information including complete sets of "*The Vail Correspondent*" and the *"N7CFO Keyletter*", the Antique Wireless Association "*Old Timer's Bulletin*" on CD, Tom Perera's Guides and CD, Both Ingram books, Holly's "*Vibroplex*", French's "*Introduction to Key Collecting*" and "*The Vibroplex Collector's Guide*" 3rd Edition, *Morsum Magnificat* vols 31 to date (anyone have available volumes prior to 31? I would like to negotiate!!!) Not to mention the fantastic number of websites set up by avid key collectors.

I have accumulated over 160 keys, with 160 the current "official display number", and I am now starting to learn about them. Trying to understand the history of a key, who made it, when and where was it used, makes the key more interesting. It allows the key to develop a "life", and expands its meaning. I plan to set up a web site for my collection, and also to set up displays to "show and tell" at schools and other venues.

This "key collecting" thing is starting to take some meaningful form, a new avocation in my twilight years (assuming that my wife doesn't bury me and the keys in the back yard some midnight). I am always willing to hear from other collectors, or anyone else whose interest is piqued by this discourse. Telling war stories, fish stories, tall tales, and anything else key related is all part of the hobby, and I am learning, day by day, to be better at telling them all to anyone who will listen. ***Dennis Skea, KC2CCZ.***

The Jablonsky Sideswiper. Several years ago I arranged to buy a "German bug" from a fellow in W4 land. I was not terribly disappointed when the "bug" turned out to be a sideswiper! At that time I asked for further information on the MorseCode reflector, but very little was forthcoming.

Recently Yann, F5LAW, and I were discussing sideswipers, and he mentioned his "Jablonsky" model, made in Germany. When he sent me a picture, I knew exactly what my sideswiper was!

We are aware of the existence of at least 3 Jablonkys, and would be interested in learning of more. We think that the three digit numbers that appear on the gray metal sub-base may be serial numbers. Mine has the number 082, Yann's is 246, and another collector has 243. Each of the keys also has a label which says:

> "Ingenieurhochschule f. Seefohrt, Warnemunde/Wustrow, Eigentum des Volkes", with space for an inv. no. A rough translation from Tim Patton is: "Engineer university f. Seefohrt, Warnemunde/Wustrow, property of the people."

Yann and I have done a little more digging, and came up with some additional information on the "Jablonsky". One European source tells us: "There were hundreds of these keys but most of them have been destroyed."

Greg, DL1BFE, kindly supplied the following: "Jablonsky was a company in or near Berlin/East Germany. The company's name was FME. The sideswiper was made in the 60s and 70s, mainly used in the GDR radio school (trade Navy) to teach new radio officers. It was used in the East German coast station Ruegen Radio as well. The company also produced a bug - named FME-33 - in the late 1950's. If you are interested, you will find photos of the key and its "relatives" in my book FASZINATION MORSETASTEN - German telegraph keys Collector's guide."

Another fellow has one of the FME-33 bugs and describes it as follows: "I have one, and it's like a miniature Novoplex. The company was located in Berlin-Weissensee (which means "white sea"), a part of the former East-Berlin. In 1970 they started to produce the key which you have, in German called a "Doppel-Seiten-Taste", translated "double side key. Obviously they took some parts from the bug."

So, my "mystery key" has now been identified. But, as Yann says, one bit of the mystery remains. Who is (was) Jablonsky? Was he an engineer, teacher, or entrepreneur? If FME named a key after him, he must have been someone special! ***Don Karvonen, K8MFO.***

Morse is music to an old-timer's ears.

By Bill Taylor, Staff Reporter *The Toronto Star.* Friday, October 25, 2002. (Reprinted with permission of the Toronto Star)

It's like a voice from another world - through waves of static, a staccato barrage of dee-dees and dah-dahs. Murray Willer adjusts the tuning knob and listens intently to the receiver hissing and beeping in his Forest Hill basement.

"Sounds like an American," he says. "He's yakking away."

Willer "speaks" Morse code almost as fluently as he does English. He can transmit it at 18 words a minute and receive at 20 words a minute. The *real* operators can send and receive at 40 or 50 words a minute," he says. "At that speed, it sounds like music."

Willer knows music, too. He paid his way through the University of Toronto's engineering school in the early '30s "as a professional musician with big bands. I played saxophone, clarinet and flute.

"Once I got married, I realized I couldn't continue playing at night and being an engineer by day. It wasn't fair to my wife. So I gave up music. Cut it right off. Yes, yes, I have regrets about it, that I didn't carry on with it as a hobby. But back then it seemed the only way."

Willer is 89 but doesn't look it. He grins. "There's no secret to growing old," he says. "Just don't die. I'm nobody special, you know. Don't let them tell you that I am."

The U of T would beg to differ. Last evening, he was one of six people inducted into the Engineering Alumni Hall of Distinction. He'll also receive the Malcolm F. McGrath Alumni Achievement Award.

"I'm not sure why," Willer says. "I don't feel I deserve this, you know."

Perhaps it's because of the work Willer did during World War II helping build a Canadian version of the Avro Lancaster bomber. Or the part he played in developing the Jetliner, "the first jet transport in North America. It was a very exciting period," he says.

Avro was carrying out fascinating work. We were all SO young, we thought we could do the impossible. And then we carried on and did it."

The Korean War kept the Jet-liner from entering production. The Avro Arrow supersonic jet fighter, which Willer was also involved with, was similarly ill-fated.

"That was so sad, particularly when the government said, 'Destroy everything.' There was no real reason to do that. Many of the fellows left aviation after the Arrow was killed."

Willer set up his own engineering company and retired in 1986. He and his wife Marilyn have

> five children and two grandchildren. You'd think five children would generate a few more," he says. He immerses himself in history. "I like looking back. It can be scary looking forward."
>
> His collection of about 500 Morse tappers and signalling lights and mirrors is reckoned to be the largest in Canada. His radio call sign is FRX – "Fox- trot, Romeo, X-Ray." Through the receiver comes an urgent, "Dah-dah-dah, dah-dah-dah." " Go ahead," he's saying, " Willer says. " 'Go ahead.' " (Note, the Morse 'typo' in this paragraph was the reporter's, not Murray's!)

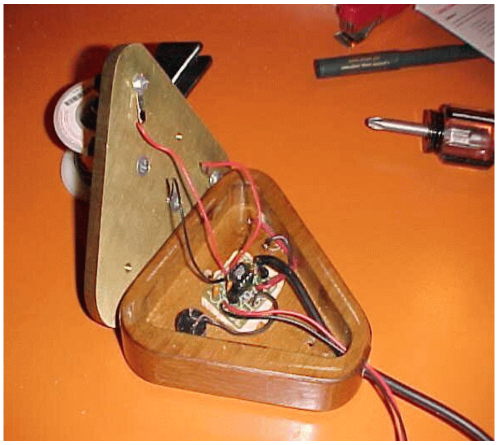
SE-1143 & SE 4015. The SE 1443, SE 1443A, SE 1443B, and the SE 4015 are all listed in the 1921 Navy equipment inventory directory as "Keys, flameproof" for "aircraft".

The SE 1443A was for "aircraft, same as SE 1443 except a flame-proof cover supplied over the terminals" The SE 1443B was for "aircraft, same as the SE 1443A except manufactured without drawings." The SE 4015 was for "aircraft, same as SE 1443 with transformer 110 to 6 volts with 6 volt winker lamp."

I have photos and brochures showing the key in use, it was a transitional key used on both CW and spark aircraft transmitters. I have a picture of the SE 1443A in use with a leg clamp with a 75 watt CW airplane transmitter, Hartley type oscillator (Radiotron). I have the entire "confidential" Navy spec manual on the Aircraft Radio Transmitting Equipment Type SE 1310 For Flying Boats-- Type HS-2-L, the booklet being issued on July 1, 1919. It clearly shows the SE-4015 in use with a synchronous rotary spark gap transmitter.

And the piece-de-resistance - I have the design drawings for the SE 1443A, dated Jan. 2, 1919, by the Radio Division, BuSE, Washington D.C. Both the SE 1310 and the SE1300 (the manual for which I also have a copy of!) flying boat radios were made by the International Radio Telegraph Company. Both were spark transmitters. The SE 1300 used the CQ 1140 key and winkers made by International Radio Telegraph Company. Although I have nothing that directly states this, the odds are very high that the International Radio Telegraph Company was the main contractor for the SE 1443 series of keys.

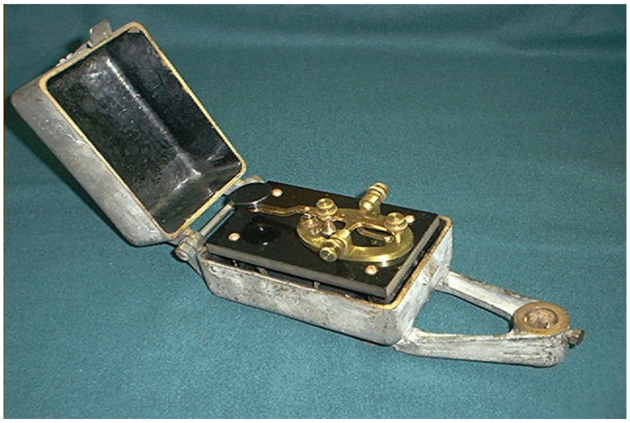
In my own collection, I have the SE 1443A and the SE 1443C. I would love to run into a SE 4015 one of these days, I have a nice picture of one. I haven't added this series of keys to the Spark Key Project because I don't have conclusive proof (almost!) that International Radio Telegraph Company was the manufacturer, or the sole manufacturer. I guess I probably should add it under their listing. The manual for the SE 1310 clearly states they manufactured the radio, and the SE 4015 is clearly listed as part of the radio. I personally gathered all this info from the G.H. Clark Radioana collection of the Archives Center of the National Museum of American History, Smithsonian Institute so I know it to be accurate. ***Russ Kleinman, WA5Y.***

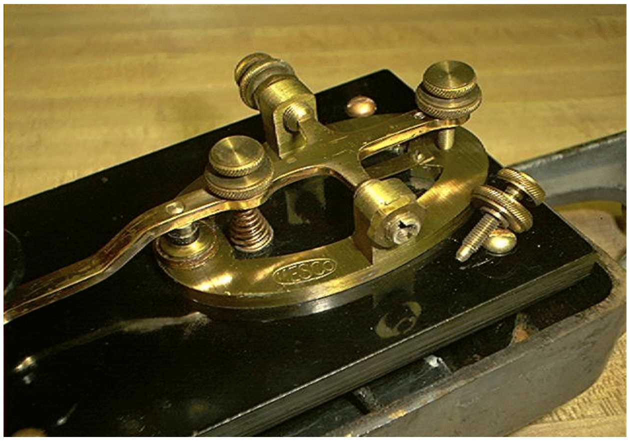


Vibroplex EK-1 update. I was sitting here looking at a surfeit of Brass Racers sitting on my shelf. I had an EK-1 and wasn't very happy with it so I decided to take one of the Brass Racers and fit a TIC-4 keyer in the base. I built the TIC keyer so that it could be used with a piezo speaker and used a RS 273-078 audio transducer as the speaker.

In order to keep the Brass Racer as stock as possible I used a magnetic switch which was inset into the side of the interior space of the Brass Racer base. The magnetic switch can be usually purchased at a model train shop where it isused as a block actuator reacting to magnets glued into the bottom of rail cars.

All of these bits fit nicely into the base of the Brass Racer and once I find a good coin size battery I'll fit that into the base also. You can see from the photo the TIC keyer, the miniature transducer, and on the far side of the base, the magnetic switch. It's very easy to program the keyer with a small magnet held near where the magnetic switch is mounted in the base. ***Tim Soxman, W3ZVT.***





MESCO Bulkhead Blinker Key. I just finished cleaning up a ship's signal light key and heavy duty housing. This is the fifth one I have picked up and certainly the most interesting. The enclosure is heavy cast brass and originally painted battleship grey. In the cover's black paint the markings are C L (space) CO., or the Lowenstein Company and below is "1 (space) 23" or January 1923. The key is by MESCO/Manhattan Electric Supply Co, and is fashioned as their brass oval-based spark key and has two short legs which go through the 5/16 inch thick base. This is for connecting to the capacitor below and to the key line. Contacts are 1/4 inch silver/replaceable and it has the strap from lever to ground/frame. The unusual part is that the hardware which goes through the frame/trunnion is a larger diameter and is threaded on the outside AND on the INSIDE and has a locking bolt on the outside. This piece is the one used to adjust lever adjustment pressure and the normal adjustment hardware goes into the inside threads of it. I have never seen anything like this in my 20 years of collecting. Has anyone else? ***Chuck Brydges.***

Wireless in submarines.

Summary of Known Wireless Use on Submarines 1906-1918:

1906-- U.S. Navy reports that experiments with wireless telegraphy on submarines were in progress, but that "It is doubtful, however, if the use of wireless in submarines will be of value."

April 1909-- Lieutenant-Commander Cleland Davis, U.S.N, reports on status of experiments on submarines "Tarpon" and "Stingray", and the yacht "Starling". Equipment received from Prof. Fessenden does not work properly. And on a dock submergence test, leaks are found where the leads enter the submarine. It is felt to be an easy task to mount the generator of the motor generator set on two straps hung from beams directly over the engine used for running the ship's direct current generator, this alternating current generator being run by belts from the engine.

June 1909-- U.S. Navy experiments (Clark) at the Navy Yard, Washington and at the Navy Yard, Norfolk, VA show that it is possible to transmit between launches for a distance of 75 yards working with 1/8 KW on 425 meters. The equipment of the launches consist of two insulated wires seventeen feet long submerged four feet below the surface. A marked directional effect is noted.

1915-- Russian Navy conducts experiments between shore stations and submarines in the Baltic Sea. Placed on board the submarine was a triangular loop of insulated wire, the ends of the loop were brought in thru the periscope fair water down to the radio room. With this arrangement, they copied a 5 KW spark station at a distance of 45 miles when the top of the loop was submerged 10 below the surface. They were also able to send 10 miles from the submarine, but not know what power or at what depth.

1916-- British experiments show that signals from the HMS Vernon's 3KW arc on 3000 meters were heard at a distance of 5 miles when the top of the loop of a submarine was submerged 9 feet. Signals from the Eiffel tower station 180 miles away heard using a rectangular loop at 9 feet using an audion detector. Towed antenna consisting of a length of insulated wire gave the same results, but was abandoned due to erratic behavior of the antenna in the wake of the submarine.

1917-- As far as the U.S. Navy was aware, no underwater receiving apparatus was used on board German submarines up to July, 1917. It was understood that German boats were equipped during the early part of 1918 with underwater transmitting apparatus that was capable of transmitting 90 miles when submerged.

1917-- Lieut. DeBroglie of the French Navy perfects system for receiving radio signals on board submarines which is accepted by French, English and Italian Navies. This system consists of two multiple turn loop coils situated at an angle of 90 degrees from each other and place on the bridge of the submarine. A seven stage amplifier is used with this system and signals are reliably received when the loops are submerged 16 feet. A distance of 750 miles is reported as the best distance that signals were received when the submarine was submerged. No data on transmitting available.

June 1918-- U.S. Navy experiments succeed in hearing signals from 13000 meter wavelength 300

KW Nauen, Germany station with loop antenna submerged 8 feet at a distance of 4000 miles. The 100 KW Tuckerton 9600 meter Tuckerton station is heard at a distance of 150 miles with the top of the loop antenna 21 feet from the surface.

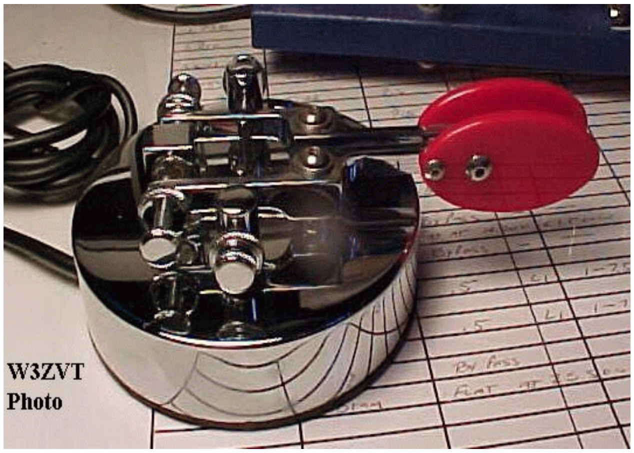
September 1918-- U.S. Navy succeeds in transmitting a distance of 3 miles with loop current of 6 amps on 952 meters with the loop submerged 9 feet. Single turn loop antenna concluded to be the most efficient form of antenna for underwater work. Directional characteristics of the loop found to be a disadvantage as the submarine has to be turned to transmit.

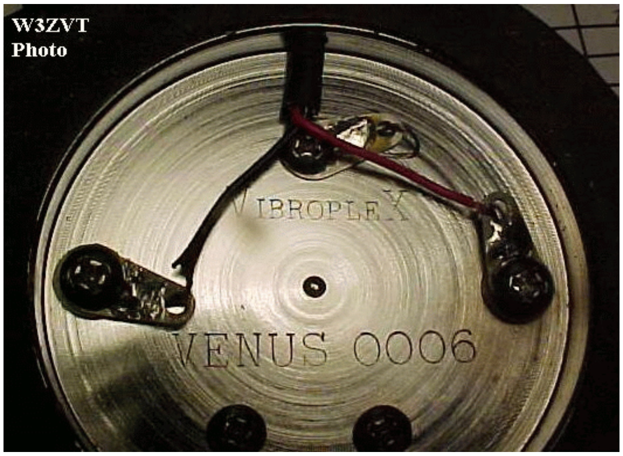
November 1919-- description of captured U-Boat radio appears in QST, including the key.

I hope that some of this is of interest to somebody besides me! ***Russ Kleinman,WA5Y.***

Bunnel-Martin Flash Key. I recently obtained a Bunnell Martin 5-44 Flash Key (nickel) which has a much thinner base than the others I have - rather unusual - wonder if anyone else has seen these thin bases? ***Tony Rogozinski, N7BG.***

Vibroplex Venus. I talked to Betsy at Vibroplex about the production of the Vibroplex Venus paddles. There were three runs of 10 each. Out of that a total of only 26 were made. The other four keys were used as parts for keys that needed parts replaced to put them within specification. The runs were spaced from January of 2001 to January of 2002 and they quit selling them in June of 2002. My Vibroplex (0006) was from the first run, and I will soon have 0025 from the third run. Many of the first run were sold to collectors or individuals that maintained a dialogue with Vibroplex. These were sold prior to the Dayton announcement. It appears that the actual run was about a year to a year and a half at the most. My guess is that the Venus will fall into the "rare" key class. ***Tim Soxman, W3ZVT.***



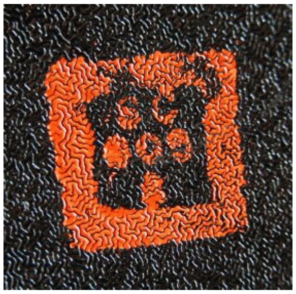


A.W. Bowman Spark Keys. I have been in contact with Bill Bowman, the son of A.W. Bowman who made the well-known marble based spark keys that were marketed by Sears and Montgomery Ward. Bill Bowman is now 87 years old and has trouble hearing over the telephone, but he related the following information about A.W. Bowman Co. that I thought might be of interest to you (I have already added it to the Spark Key Project.

Albert William Bowman started out as a die and tool maker for a piano maker, then started making spark keys during his free time at night in a barn on the family property in Belmont, MA. At the height of production, the company employed 14 people after moving to Cambridge, MA. The company did not survive the depression. During the boom times, Sears was one of Bowman's best customers. The company also made crystal detectors after WWI. One of the company's last products was a 5-tube Neutrodyne, using 201-A's. In the early 1930's, at the request of his son, William Bowman, A.W. Bowman custom produced one bug based on the Vibroplex style-- the fate of that bug is not known! A.W. Bowman died in his 70s sometime after World War II. Unfortunately, when Bill's mother (AWB's wife) died, all the paper/attic stuff was taken to the dump and lost forever. He does not have anything at all left that his dad made. ***Russ Kleinman, WA5Y.***

Information please! Robert Baumann (rgbdenver@att.net) is looking for any information on the following two items.

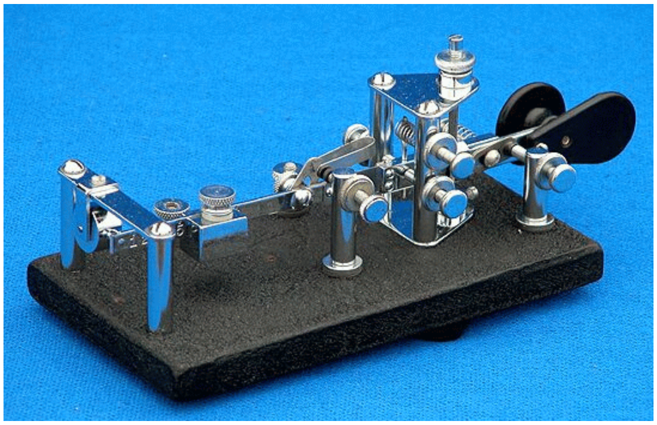
Western Electric Test Unit J70045D-2 Also bears: 163C1	Keyer KY-36/CRN-10 Manufactured by Time-O-Matic, Inc. Danville, Illinois

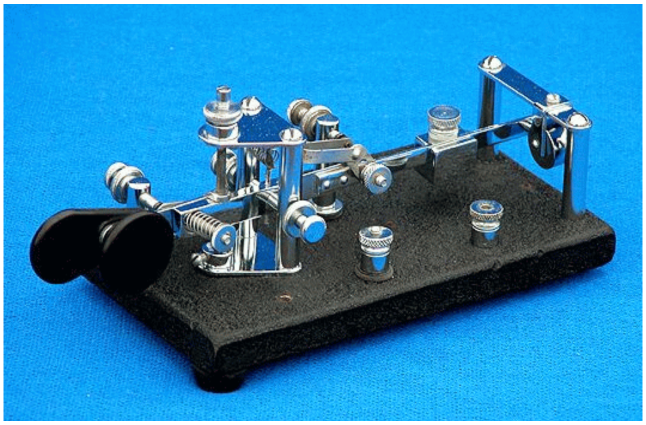


Hybrid Lionel J-36 bugs. An interesting thread developed on the Morsecode reflector about hybrid Lionel J-36 bugs. It started when John Rehak, N6HI, asked for help identifying a bug. It had finger pieces, posts, etc. that looked like a Lionel J-36, but no nameplate. There were nameplate holes that were not located where they would typically be on a J-36 - they were placed where they would be on a Vibroplex Lightning Bug.

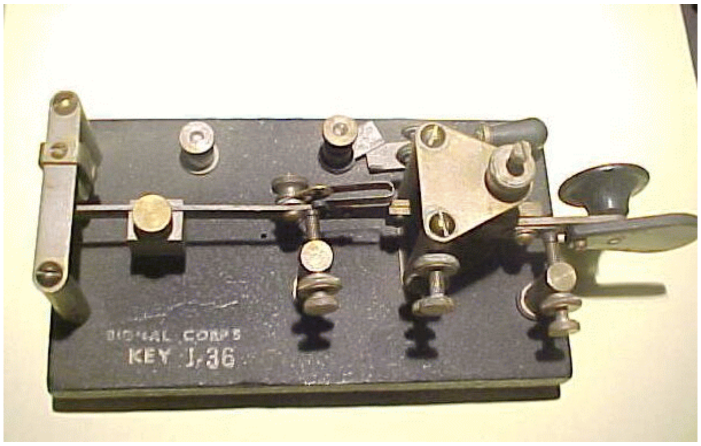
This bug has an orange stamp on the bottom that is not really readable. Upon VERY close examination, this key clearly DID have a nameplate at one time, in the Vibroplex location, and the nameplate outline, barely visible, is of a long thin nameplate, about 3 ½" long X 3/8" wide. These holes have the paint disturbed indicating that something was attached there. This key also has a hole drilled to mount a circuit closing switch.

Martin, DK4XL, did a web search and came up with a highly informative writeup on Tom Perera's web page: *(N6HI photos)*

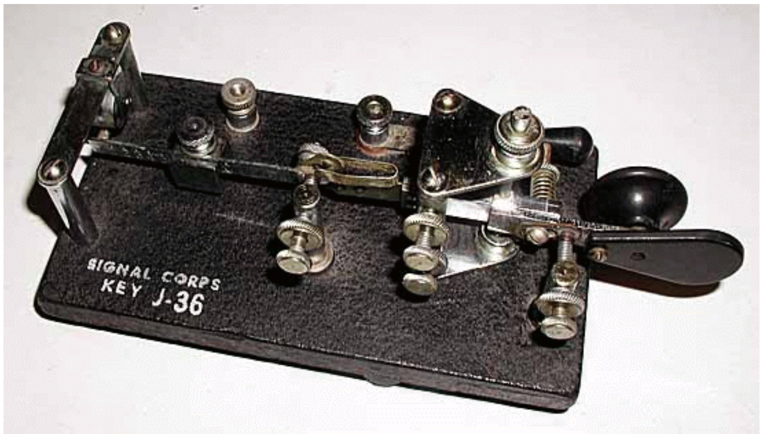




"This is a very unusual J-36 bug which has a partly Lionel J-36 mechanism and a partly Vibroplex J-36 mechanism mounted on an unlabeled Vibroplex J-36 base. Instead of a Vibroplex label, the Base carries the stamped words: SIGNAL CORPS KEY J-36. The only other unusual markings are the red letters MFP stamped on the end of the key. MFP stands for "Moisture and Fungus Proofed" and indicates that the key had received a special coating to reduce corrosion and deterioration."



"The Lionel J-36 bug was a licensed copy of the Vibroplex Lightning bug which was made during WW-II by Lionel because Vibroplex could not produce them in adequate quantities to fill the needs of the military. This bug was probably one of the very early Lionel J-36 models which was produced before Lionel developed its own Label and some of its own parts. Vibroplex most likely supplied the base without the label and some parts and Lionel added the other parts of the mechanism. This key clearly never had the Vibroplex label and one of the two holes designed to mount the label is still filled with the wrinkle-finish paint." *(Reprinted by permission of Tom Perera)*



Don Karvonen, K8MFO, then weighed in:

I looked at both your photos and those on Tom's website. I compared them with the "hybrid" and with a Vibroplex J-36 that I also have.

1. Both Tom's and mine have identical markings on the bases. "Signal Corps Key J-36" and "MFP" appear on both keys. Both keys have holes in the base which look like they are suited for a Vibroplex nameplate, though neither key has ever had a nameplate. The N6HI key appears to have had a nameplate at one time.

2. I measured the contact post diameter on my bugs. All the Lionels and the hybrid measure 5/16", but the Vibroplex J-36 measures 1/4". The difference is also very noticeable to the naked eye.

3. The plating on my Lionels and the hybrid is not nearly as bright as that on my Vibroplex J-36. It also seems that the plating is brighter on both the N6HI and W1TP keys. (K8MFO photos)

4. All of my J-36 type bugs have a circuit closer. The W1TP key has a circuit closer. The N6HI key does not have one.

5. Except for the base, my hybrid is "Lionel all the way".

After hearing from Don, John Rehak measured the posts on his Hybrid, and they are 5/16" diameter, substantiating that his is indeed a Hybrid, and indicating that this key is also "Lionel all the way" except for the base.

At least PART of the orange stamp on Rehak's bug is readable. John's son swears up and down that he can read the entire thing and that the stamp "obviously" says SC 009 8. John is not sure about the last part, but is certain of the SC part. Per Mike Feher, N4FS, "SC" stands for "Signal Corp".

Morsecode Bits & Pieces.

Bill Pierpont, N0HFF, SK. Bill Pierpont, age 88, became a Silent Key Feb 20, 2003. As many of you know, Bill Pierpont was the author of The Art & Skill of Radio-Telegraphy. His generous gesture of distributing this book freely on the Internet and printed at no profit to himself, allowed this inspirational and educational publication to be enjoyed by hams all over the world. It has been translated and published in several languages He made a major contribution to Amateur Radio and will be sorely missed. ***Neal McEwen, K5RW.***

Dunduplex. In issue #35 Neal McEwen comments about a Dunduplex with a Vibroplex Decal on the bottom of the base - SN5104. My #5106 also has the Vibroplex Decal on the base - it's the "Cushion" model - late teens vintage - apparently another effort to market this bug. ***Tony Rogozinski, N7BG.***

Great Northern Telegraph. Neal McEwen sent the following:

"Hi Neal, I came across your Foreign Key Photo gallery by chance, and was very interested in the GNT telegraph key. [A double current key identical to GPO design, http://www.metronet.com/~nmcewen/FKG-images/Danish-double-current.jpg] I was employed in London as a telegraphist by Great Northern Telegraph from 1957-1963, and learned to operate morse on a key identical to the one you illustrate.

At that time, the company still operated high speed morse links (about 100 wpm) using paper tape between London, and Gothenburg in Sweden, Fredericia in Denmark, Helsinki, Moscow and Warsaw. If there was a problem on the cable system, then we had to call in the technicians using the morse keys. The last ones were done away with in 1960 when a co-axial telegraph cable was laid between the UK - Denmark and all links became teleprinter links.

Some of the morse equipment, keys, undulators, keyboard perforators etc were given to the Science Museum in London, and the remainder were offered to staff who mainly said 'What do we want that rubbish for' - Now I wish I had taken the lot. GNT is still in business today and offers a wonderful free booklet on their history. Just go to their web site and request it from the web master. Best regards - Mike Penrith, NSW, Australia."

Breedlove Codetrol. The Codetrol was made in 1950-51 and advertised in QST. In a conversation with Breedlove c. 1983, he indicated less than a few dozen made, mostly sold in Europe. He was a prolific guy and had patents for other code related stuff including a dual pendulum bug for which there was only a prototype. ***Neal McEwen, K5RW.***

Bug paint. Most of us have taken on nasty keys that need to be painted. And most of us have purchased Rust-Oleum enamel spray paint or something similar. I don't care what you do the paint is always sticky even 6 months later and God help you if you place your finger on it or accidently poke it with your fingernail. It's just soft, that's all. This product was new to me, but maybe some of you know about it. Yesterday I found Rust-Oleum "Hard Hat" at Home Depot. I tried it and sure enough the paint dried to a rock hard finish. Recently, I purchased a "super nasty" Electro-Bug and it turned out great. ***Tim Patton, K4TJP.***

First Vibroplex advertisement. There is a Martin Autoplex ad in the May 1904 Railroad Telegrapher. Bill Holly says (page 5) of a similar May 1904 ad in the Commercial Telegrapher's Journal that it is "the first known ad for a Martin key" in which case there is a tie for first. Holly also says (page 6) the first Vibroplex ad was in the June 1905 Commercial Telegrapher's Journal. ***Tom French, W1IMQ.***.

Pig Spit! Now, some, if not all of you, are going to laugh at this. We all attempt to clean some keys that are encrusted with dirt and grime, but attempt to save the patina of whatever it is we are working on. There is Navel Jelly, Parts Cleaners, various types of polishing agents such as Flitz or MAAS. Here is something else to try - it works like magic. Little to no effort is involved. Go to www.pigspit.com and check it out. Very cool stuff. ***Tim Patton, K4TJP.***

Well, my friends, that is issue #36 and we are now up to 456 pages of text! I will have paper copies of back issues available until I run out of them, and have burned all copies to CDs in PDF if you are interested. Please go to http://www.qsl.net/n7cfo/keyltr.htm for further information.

Please keep the cards and letters coming. I have now reorganized the Keyletter operation, and intend to get back to a regular production schedule. I will continue to publish an issue when I have enough material to do so, so the sooner you submit articles the sooner you can expect your next Keyletter!

73

Lynn
N7CFO/VA7CFO